

Claims

1. Method for the transmission of data via at least one subscriber's connection (TA) located in at least one communication network (OKN),  
5 in which connection data (port-id) representing the at least one subscriber's connection (TA) is transmitted to the communication network (OKN, ASR) and in which the transmitted connection data (port-id) is used to authenticate the data to be transmitted via the at least one subscriber's connection  
10 (TA) .
2. Method in accordance with claim 1,  
characterized in that,  
the connection data (port-id) is designed as a port  
identification or PORT-ID and/or represents at least one  
15 subscriber connecting line (TAL) connected to the at least one subscriber's connection (TA) .
3. Method in accordance with claim 1 or 2,  
characterized in that,  
the transmitted connection data (port-id) is stored in the  
20 communication network (OKN, ASR) .
4. Method in accordance with one of the preceding claims,  
characterized in that,  
the data to be transmitted is transmitted within the framework  
of a communication link (PPPoE) via the at least one  
25 subscriber's connection (OKN), in which the connection data (port-id) is at least transmitted to the communication network (BKN, ASR) on the establishment of a communication link (PPPoE) .
5. Method in accordance with one of the preceding claims,  
30 characterized in that,

the communication network (BKN) is designed as a packet-oriented or a cell-oriented communication network, and that the data and the connection data (port-id) are transmitted by means of the PPP protocol.

5 6. Method in accordance with claim 5,  
characterized in that,  
the packet-oriented or cell-oriented communication network (OKN) is at least partly designed in accordance with the Ethernet transmission method.

10 7. Method in accordance with claim 6,  
characterized in that,  
the data and the connection data (port-id) are transmitted via the at least one subscriber's connection (TA) in accordance with the PPPoE transmission method in accordance with RFC  
15 2516.

8. Method in accordance with claim 7,  
characterized in that,  
the connection data (port-id) is inserted as the "Relay Session ID TAG" into the PPPoE Active Discovery (PADI)  
20 messages transmitted via the at least one subscriber's connection (TA) to the communication network (OKN, ASR).

9. Method in accordance with claim 7 or 8,  
characterized in that,  
the at least one subscriber's connection (TA) which is  
25 allocated to a switching device (VE) located in a communication network (OKN), in which through the switching device (VE), the connection data (port-id) is inserted into the PPPoE Active Discovery (PADI) messages and is forwarded to an access network element (ASR) located in the at least one  
30 communication network (OKN) and which is transmitted further to the access network element controlling the at least one

communication network (OKN, IP).

10. Method in accordance with claim 9,  
characterized in that,

in the access network element (ASR), the "Relay Session ID  
5 TAG" identifies data in the transmitted PPPoE Active Discovery  
(PADI) messages, extracts the connection data (port-id) and  
the extracted connection data (port-id) is transmitted from  
the access network element (ASR) to an authentication network  
element (RADS) located in the communication network (OKN), in  
10 which the data to be transmitted is verified by the  
authentication network element (RADS) by using the transmitted  
connection data (port-id).

11. Method in accordance with one of the preceding claims,  
characterized in that,

15 via the at least one subscriber's connection (TA), at least  
one subscriber is connected to the communication network  
(OKN), and that  
the verification of the authentication is carried out by using  
the transmitted connection data (port-id) and by using the  
20 subscriber data representing the at least one subscriber.

12. Method in accordance with claim 11,  
characterized in that,

the subscriber data includes at least one user name and at  
least one password.

25 13. Communication system for the transmission of data via at  
least one subscriber's connection (TA) located in at least one  
communication network (OKN),  
with the means (EM) for the transmission of connection data  
(port-id) to the communication network (OKN) representing the  
30 at least one subscriber's connection,  
with the authentication means (RADS) located in the

communication network (OKN) in order to verify the authenticity of the data to be transmitted via the at least one subscriber's connection (TA) by using the transmitted connection data (port-id).

5 14. Communication system according to claim 13,  
characterized in that,  
the at least one subscriber's connection and the means (EM)  
for the transmission of the connection data (port-id) is  
allocated to a switching device (VE) located in the  
10 communication network.

15. Communication system according to claim 13 or 14,  
characterized in that,  
the communication network is at least partly designed in  
accordance with the Ethernet transmission method, in which the  
15 data to be transmitted is transmitted via the at least one  
subscriber's connection (TA) in accordance with the PPPoE  
transmission method in accordance with RFC 2516.

16. Communication system according to claim 15,  
characterized in that,  
20 the means (EM) for the transmission of connection data (port-  
id) is designed in such a way that via these means the  
connection data (port-id) is inserted as the "Relay Session ID  
TAG" into the PPPoE Active Discovery (PADI) messages  
transmitted via the at least one subscriber's connection (TA)  
25 to the communication network (OKN, ASR).